

CLAIMS

30 1. (Currently Amended) A computer implemented method for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, the method comprising the steps of:

 determining a threshold access value for each node of said plurality of nodes;

 determining a level of access value for each node of said plurality of nodes;

35 comparing said level of access value for a first node of said plurality of nodes with said threshold access value for said first node of said plurality of nodes, and if said level of access value for said first node is less than said threshold access value for said first node, merging said first node with a related non-parent node arranged laterally to said first node in said hierarchical arrangement; and

40 comparing said level of access value for said first node of said plurality of nodes with said threshold access value for a second node of said plurality of nodes, and if said level of access value for said first node is greater than said threshold access value for said second node, promoting said first node to a higher level in said hierarchical arrangement than said second node, and if said level of access value for said first node is less than said threshold
45 access value for said second node, demoting said first node to a lower level in said hierarchical arrangement than said second node.

 2. (Original) The method of Claim 1, wherein said threshold access value comprises a threshold user access value, said level of access value comprises a level of user
50 access value, and said user includes at least a person, automatic browsing device, or data collection device.

 3. (Original) The method of Claim 1, wherein said level of access value for each node comprises usage of information content associated with each node.

55 4. (Original) The method of Claim 1, wherein the step of determining a level of access value for each node comprises determining a sum of user access requests to each node and at least one child of said each node plus a sum of searches or queries performed wherein

a result of said searches or queries includes at least one of said each node or a content of said
60 at least one of said each node.

5. (Original) The method of Claim 1, wherein the step of merging said first node
with a related node arranged laterally to said first node in said hierarchical arrangement
comprises retiring said first node and combining a content of said first node with a content of
65 said related node.

6. (Original) The method of Claim 1, wherein said related node arranged
laterally to said first node comprises a node arranged in parallel and in a same category with
said first node.
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7. (Original) The method of Claim 1, wherein said plurality of nodes arranged
hierarchically comprises a tree structure.

8. (Original) The method of Claim 1, wherein said taxonomy comprises a top-
75 down multilevel taxonomy.

9. (Original) The method of Claim 1, wherein said related node is identified by a
proximity feature associated with said first node and said related node.

10. (Original) The method of Claim 1, wherein said level of access value
80 comprises at least a sum of IP addresses computed for a predetermined interval of time.

11. (Original) The method of Claim 1, wherein said level of access value
comprises at least a sum of different IP addresses computed for a predetermined interval of
85 time.

12. (Previously Presented) The method of Claim 1, wherein said level of access
value comprises at least a sum of different identifiers computed for a predetermined interval
of time.
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13. (Original) The method of Claim 1, wherein said taxonomy comprises a product catalog database.

14. (Original) The method of Claim 1, wherein said taxonomy comprises a
95 WWW directory.

15. (Original) The method of Claim 1, wherein said taxonomy comprises advertisement pricing information.

100 16. (Original) The method of Claim 1, wherein said taxonomy comprises a dynamic pricing map based on usage.

17. (Original) The method of Claim 1, wherein said taxonomy comprises a call
105 center resources allocation map based on usage.

18. (Currently Amended) A computer implemented method for maintaining a dynamic taxonomy, the method comprising the steps of:

determining a threshold usage value for each node of a plurality of nodes of said dynamic taxonomy;

110 determining an actual usage value for each node of said plurality of nodes;

comparing said actual usage value for a first node of said plurality of nodes with said threshold usage value for said first node of said plurality of nodes, and if said actual usage value for said first node is less than said threshold usage value for said first node, merging said first node with a related non-parent lateral node.

115 19. (Original) The method of Claim 18, further comprising the steps of:

comparing said actual usage value for said first node of said plurality of nodes with said threshold usage value for a second node of said plurality of nodes; and

120 if said actual usage value for said first node is greater than said threshold usage value for said second node, promoting said first node to a higher level than said second node in a hierarchy associated with said dynamic taxonomy.

20. (Original) The method of Claim 18, further comprising the steps of:
comparing said actual usage value for said first node of said plurality of nodes with
125 said threshold usage value for a second node of said plurality of nodes; and
if said actual usage value for said first node is less than said threshold usage value for
said second node, demoting said first node to a lower level than said second node in a
hierarchy associated with said dynamic taxonomy.

130 21. (Currently Amended) Logic encoded in a computer-readable media for
adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically,
and operable to:

determine a threshold access value for each node of said plurality of nodes;
determine a level of access value for each node of said plurality of nodes;
135 compare said level of access value for a first node of said plurality of nodes with said
threshold access value for said first node of said plurality of nodes, and if said level of access
value for said first node is less than said threshold access value for said first node, merge said
first node with a related non-parent node arranged laterally to said first node in said
hierarchical arrangement.

140 22. (Original) The logic of Claim 21, further operable to:
compare said level of access value for said first node of said plurality of nodes with
said threshold access value for a second node of said plurality of nodes; and
if said level of access value for said first node is greater than said threshold access
145 value for said second node, promote said first node to a higher level in said hierarchical
arrangement than said second node.

23. (Original) The logic of Claim 21, further operable to:
compare said level of access value for said first node of said plurality of nodes with
150 said threshold access value for a second node of said plurality of nodes; and
if said level of access value for said first node is less than said threshold access value
for said second node, demote said first node to a lower level in said hierarchical arrangement
than said second node.

155 24. (Currently Amended) A computer-implemented system for adaptably
maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, comprising:

a processor; and

a data storage unit coupled to said processor, said data storage unit operable to store
said taxonomy, said processor in association with said data storage unit operable to:

160 determine a threshold access value for each node of said plurality of nodes;

determine a level of access value for each node of said plurality of nodes;

compare said level of access value for a first node of said plurality of nodes with said
threshold access value for said first node of said plurality of nodes, and if said level of access
value for said first node is less than said threshold access value for said first node, merge said
165 first node with a related non-parent node arranged laterally to said first node in said
hierarchical arrangement; and

compare said level of access value for said first node of said plurality of nodes with
said threshold access value for a second node of said plurality of nodes, and if said level of
access value for said first node is greater than said threshold access value for said second
170 node, promote said first node to a higher level in said hierarchical arrangement than said
second node, and if said level of access value for said first node is less than said threshold
access value for said second node, demote said first node to a lower level in said hierarchical
arrangement than said second node.

175 25. (Original) The system of Claim 24, wherein said level of access value for
each node comprises usage of information content associated with each node.

26. (Original) The system of Claim 24, wherein determining a level of access
value for each node comprises determining a sum of user access requests to each node and at
180 least one child of said each node plus a sum of searches performed wherein a result of said
searches includes at least one of said each node or a content of said at least one of said each
node.

185 27. (Original) The system of Claim 24, wherein merging said first node with a related node arranged laterally to said first node in said hierarchical arrangement comprises retiring said first node and combining a content of said first node with a content of said related node.

190 28. (Original) The system of Claim 24, wherein said related node arranged laterally to said first node comprises a node arranged in parallel and in a same category with said first node.

195 29. (Original) The system of Claim 24, wherein said plurality of nodes arranged hierarchically comprises a tree structure.

30. (Original) The system of Claim 24, wherein said taxonomy comprises a top-down multilevel taxonomy.

200 31. (Original) The system of Claim 24, wherein said related node is identified by a proximity feature associated with said first node and said related node.

32. (Original) The system of Claim 24, wherein said level of access value comprises at least a sum of IP addresses computed for a predetermined interval of time.

205 33. (Original) The system of Claim 24, wherein said taxonomy comprises a product catalog database.

210 34. (Original) The system of Claim 24, wherein said taxonomy comprises a WWW directory.

35. (Original) The system of Claim 24, wherein said taxonomy comprises advertisement pricing information.

215 36. (Original) The system of Claim 24, wherein said taxonomy comprises a dynamic pricing map based on usage.

37. (Currently Amended) A computer implemented system for adaptably maintaining a taxonomy defined by a plurality of nodes arranged hierarchically, comprising:

means for determining a threshold access value for each node of said plurality of

220 nodes;

means for determining a level of access value for each node of said plurality of nodes;

means for comparing said level of access value for a first node of said plurality of nodes with said threshold access value for said first node of said plurality of nodes, and if said level of access value for said first node is less than said threshold access value for said
225 first node, merging said first node with a related non-parent node arranged laterally to said first node in said hierarchical arrangement; and

means for comparing said level of access value for said first node of said plurality of nodes with said threshold access value for a second node of said plurality of nodes, and if said level of access value for said first node is greater than said threshold access value for
230 said second node, promoting said first node to a higher level in said hierarchical arrangement than said second node, and if said level of access value for said first node is less than said threshold access value for said second node, demoting said first node to a lower level in said hierarchical arrangement than said second node.